

TABLE 3.1
PROJECTED POWER PLANT ANNUAL CAPACITY FACTORS^a

Plant	Unit	Type	Fuel	Net Capacity (MW) ^b	1999 Baseline (No Project)	Plants with Lowest Natural Gas Price (1999)			1999 Analytical Maximum ^c	2005 Cumulative Analytical Maximum ^d
						All Plants	Contra Costa and Pittsburg	Potrero		
Potrero	3	ST	NG	207	41	68	41	76	76	64
	4	CT	DF	52	3	3	3	3	3	9
	5	CT	DF	52	2	2	2	2	2	8
	6	CT	DF	52	1	1	1	1	1	7
Annual Plant Capacity				363 ^e	25	39	24	44	44	40
New 480 MW S.F. Plant		CC	NG	480	NA	NA	NA	NA	NA	91
Contra Costa	6	ST	NG	340	32	71	71	32	71	70
	7	ST	NG	340	40	88	88	40	88	69
	Annual Plant Capacity				680 ^e	36	80	79	36	80
Pittsburg	1	ST	NG	163	23	43	43	23	43	45
	2	ST	NG	163	23	68	69	23	69	70
	3	ST	NG	163	33	76	76	33	76	retired
	4	ST	NG	163	28	66	66	28	66	retired
	5	ST	NG	325	39	81	80	39	81	60
	6	ST	NG	325	40	88	87	40	88	76
	7	ST	NG	682	27	57	58	27	58	71
Annual Plant Capacity				1984 ^e	31	68	68	31	68	56/67 ^f
Geysers	5	G	GS	39/39	68	58	59	68	58	82
	6	G	GS	39/39	68	58	58	67	58	81
	7	G	GS	38/37	72	65	65	71	65	85
	8	G	GS	38/37	72	64	65	71	64	86
	9	G	GS	32/32	54	47	49	54	47	73
	10	G	GS	32/32	54	47	49	54	47	73
	11	G	GS	56/56	46	36	38	45	36	94
	12	G	GS	39/39	76	65	68	77	65	85
	13	G	GS	73/69	95	94	94	94	94	95
	14	G	GS	61/61	81	70	73	81	70	87
	16	G	GS	73/69	94	94	94	94	94	94
	17	G	GS	47/47	78	70	71	77	70	89
	18	G	GS	58/62	82	73	75	83	73	88
20	G	GS	44/46	78	67	70	78	67	86	
Annual Plant Capacity				669/665 ^e	75	68	69	75	68	87

TABLE 3.1 (Continued)
PROJECTED POWER PLANT ANNUAL CAPACITY FACTORS^a

NOTE: The capacity factors were derived using the SERASYM™ unit-specific, California-wide data set, which was processed by the SERASYM™ production cost model to forecast plant operations.

UNIT TYPES:	CT	combustion turbine	FUELS:	NG	natural gas with residual oil backup	NA = not applicable
	ST	steam turbine		DF	distillate fuel oil	
	G	geothermal steam		GS	geothermal steam	
	CC	combined cycle				

- a Capacity factor is the ratio (expressed as a percentage) of operations of a unit or plant to the rated capacity of the unit or plant.
- b Although the net capacity of Unit 7 at the Pittsburg Power Plant is listed as 720 MW in PG&E's PEA, other sources (including the Master Must-Run Agreement between PG&E and the ISO and the Bay Area Reliability Dispatch Requirements) identify the unit's maximum net capacity as 682 MW. Based on this information, the SERASYM™ model results used in this EIR reflect the 682 MW factor.
- The net capacity of the Geysers Power Plant is actually 1,224 MW (see Table 2.1 in Section 2, Project Description). The net capacities shown here are the predicted capacities for the plant based on projected steam availability in 1999 and 2005, respectively.
- c For the fossil-fueled plants, the 1999 analytical maximum capacity factor for each unit is the highest of three model runs shown immediately to the left in which (1) all three plants receive equally low gas prices, (2) the Contra Costa and Pittsburg plants receive the lowest gas price, and (3) the Potrero plant receives the lowest gas price. For the Geysers plant, the 1999 analytical maximum capacity factor is the lowest of the three model runs, since such lower operations may result in environmental impacts from steam stacking.
- d This scenario reflects the replacement of PG&E's Hunters Point Power Plant in San Francisco with a new 480 MW power plant in combination with divestiture and other cumulative projects. The 2005 cumulative analytical maximum was modeled using only the "All Plants" case because model sensitivity runs showed these results to be very similar to the runs that had the lowest natural gas price going to just the Contra Costa and Pittsburg plants or the Potrero plant.
- e Net capacity for the entire plant.
- f The total net generating capacity of the Pittsburg Power Plant would decrease in the future due to the retirement of certain generating units. In order to meaningfully portray changes in generation, two annual plant capacity numbers are presented. The first number reflects the annual plant capacity factor based upon the current total net generating capacity of the plant (where all seven units are operational), which is 1,984 MW. The second number reflects the annual plant capacity based upon the combined net generating capacity of the units that are assumed to operate in 2005.

SOURCE: Sierra Energy and Risk Assessment, Inc., and ESA, 1998.